

Patent
700603.3
(former L&L 271/123)

REMARKS

The Section 112 Issue

Applicants have resolved the section 112 issue by reciting that the contribution of ES cell progeny to the tissue types of the chicken is accomplished by detecting transgene expression.

The Section 102 Rejection over Pain et al.

With regard to claims 21, 26-30, 52, Pain et al do not disclose a stably integrated transgene in the ES cells used to create the chimeras. Moreover, as noted in the specification, the duration of culture is a critical parameter for ES cells and their practical use in avian transgenesis. The longest period achieved by Pain et al. was 19 days, and no demonstration of transgene or of a clonally derived ES cell was made. Accordingly, Pain et al. could not possibly disclose a transgene passed to a chimera through an ES cell and Pain et al. cannot anticipate the present claims under 35 U.S.C. § 102.

With respect to claims 41-48, 51, these method claims require the step of selecting cells from a culture maintained for more than 60 days. A careful reading of Pain et al. shows that the maximum duration of the ES cell population in culture actually used to create chimeras was 19 days. The ability to extend the culture beyond 60 days and maintain pluripotency is critical because this time frame permits both the introduction of genetic modifications through stable integration and selection of a transgene, and permits the hatching of a population of like chimeras.

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Applicants submit that the present claims are in condition for allowance and requests such action accordingly. If an interview would facilitate examination of this application, the Examiner is invited to contact the undersigned at 949/567-6700 X 7740.

The Commissioner is authorized to charge Orrick, Herrington & Sutcliffe's Deposit Account No. 150665 in the amount of \$55.00 for a one month extension fee and for any fees that may have been overlooked and to credit any overpayments to said Deposit Account No. 150665.

Respectfully submitted,

ORRICK, HERRINGTON & SUTCLIFFE LLP

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By: 

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